REMARKS

Claims 12-17 remain in the application. Support for the amendment of claim 12 is found on page 3, lines 14-20, and page 3, line 35 through page 4, line 2. Support for new claim 18 is found on page 6, lines 7-9. Support for new claim 19 is found on page 5, lines 15-18. Support for new claim 20 is found on page 5, lines 19-20. Support for new claim 21 is found on page 5, lines 19-22. The Examiner's reconsideration and allowance of claims 12-17 are requested.

In the Office Action dated December 20, 2001, restriction to the invention of Group I (claims 1-11) or Group II (claims 12-17) was required. In a telephone conversation on December 15, 2000, a provisional election was made with traverse to prosecute the invention of Group II (claims 12-17). This election is hereby affirmed.

The Examiner has rejected claims 12-16 under 35 U.S.C. § 102(b) for purported anticipation by U.S. Patent No. 4,156,648 to Kuepper ("Kuepper"). The Examiner asserts that Kuepper discloses the structure of the system recited in the present claims, and that the vertical plates 75 in Fig. 3 of Kuepper appear to form tubes in the flotation chamber that suggest the tubes of claim 15 of the present application. However, Kuepper relies on foam as the flotation medium. Foam is air entrapped in a bubble.

By contrast, amended claim 12 of the present application states that the buoyant medium of the present invention is a solid. Kuepper does not teach or suggest using a solid buoyant media. Claims 12-16, as amended, are therefore not anticipated by Kuepper.

The Examiner has rejected claim 17 under 35 U.S.C. § 103(a) for purported obviousness over Kuepper in view of U.S. Patent No. 5,728,304 to Yeh ("Yeh"). The Examiner asserts that claim 17 differs from Kuepper by reciting that the flotation chamber contains immersed membranes. The Examiner also asserts that Yeh discloses that it is known in the art of water treatment to include immersed screens or membranes in a flotation

chamber to minimize turbulence in the chamber, and that it would have been obvious to one skilled in the art to modify the system of Kuepper by including the immersed screens or membranes of Yeh in the flotation chamber. However, neither Kuepper nor Yeh, separately or in combination, teach a system in which a floculation chamber is in fluid communication with a flotation chamber, and the system makes use of solid buoyant media. For these reasons, it is believed that claim 17 is not obvious over Kuepper in view of Yeh.

New claims 18-21, which depend from and add further limitations to claim 12, are deemed allowable for the same reasons set forth above regarding amended claims 12-17.

Also submitted herewith is a copy of a previously submitted Information Disclosure Statement (IDS). This IDS is a resubmission of the IDS filed on June 12, 2001, and it is believed that the original submission was not entered into the file due to misstatement of the application serial number by the United States Patent and Trademark Office (USPTO). Please note that with the copy of this IDS there is a copy of the returned post card from the USPTO indicating the date received by the date stamp. In addition to this resubmission of the previously filed IDS, Applicants are submitting herewith a Supplemental Information Disclosure Statement listing prior art identified in the International Search Report dated April 23, 2001, for the corresponding PCT application.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration of the rejections and allowance of claims 12-21 is solicited.

Respectfully submitted,

WEBB ZIESENHEIM LOGSDON ORKIN & HANSON, P.C.

 $\mathbf{R}\mathbf{v}$

John W/McIlvaine Registration No. 34,219 Attorney for Applicants 700 Koppers Building 436 Seventh Avenue

Pittsburgh, PA 15219-1818
Telephone No. 412-471-8815
Facsimile No. 412-471-4094

MARKED-UP AMENDED CLAIM 12

- 12. (Amended) A system for fluid clarification comprising:
- a mixing chamber;
- a flocculation chamber in fluid communication with the mixing chamber;
- a flotation chamber in fluid communication with the flocculation chamber; [and]
- a buoyant media recovery unit in fluid communication with the flotation chamber and the flocculation chamber[.]; and solid buoyant media, wherein the solid buoyant media passes from the flocculation chamber to the flotation chamber and the buoyant media recovery unit.